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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/714,663	11/17/2000	Nathalie Garnier	05725.0810-00000	4399
22852	7590	04/29/2004	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 1300 I STREET, NW WASHINGTON, DC 20005			QAZI, SABIHA NAIM	
			ART UNIT	PAPER NUMBER
			1616	

DATE MAILED: 04/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/714,663

Applicant(s)

GARNIER ET AL.

Examiner

Sabiha N. Qazi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/18/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 11-100 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 43-100 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 11,12 and 14-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) 13 and 43-100 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

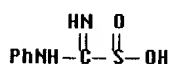
- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/18/03 has been entered.

Claims 11-100 are pending in this application. No claim is allowed. Claims 11, 12 and 14-42 are examined claims 13, and 43-100 are withdrawn from consideration as non-elected invention. Applicant's should amend the claims to a subgenus with reasonable genus which find support in the specification.

Applicants' claims are drawn to compositions of N-substituted formamidinesulphinic acid derivatives useful for permanent deformation of hair. Search for composition claim Elected invention is the compound of claim 100



imino(phenylamino)methanesulphinic acid.

After the rejection under 102 (b) this compound from claim 100 was canceled and new compound was replaced which is (carboxymethylamino)iminomathanesulphonic acid. Examiner notes, that this compound is not covered by the formula (I) of claim 11. This is not the elected invention.

The compositions examined are drawn to the one containing imino(phenylamino)methanesulphinic acid and it subgenus.

Claim Rejections - 35 USC § 112

Claims 11, 12 and 14-42 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. It is unclear what is the meaning of the citation of “chosen from” in the definition of R1, R2 and R3 in claim 11. It may be changed to “represent”.

2. What is intended by “derivatives” in claim 11?

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 11, 12 and 14-42 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

3. Following groups in the definition of R1, R2 and R3 are new matter and have no support in the disclosure.

4. 1. C1-C8 aminoiminoalkyl groups

5. 2. C2 to C8 branched alkenyl groups

6. 3. C2 to C3 rings

7. With the proviso that R1, R2 and R3 are not simultaneously equal to Hydrogen

8. Addition of last paragraph in claim 11.

All the above groups are not described in specification and therefore considered as new matter.

Applicant is requested to show if there is any support.

Claims 11-42 are rejected because these are not enabled in specification.

There is no related description in the disclosure where one skilled in the art would be able make and use of the wide range of the compositions of the compounds of formula (I) as claimed in claim 11 without undue experimentation.

The first paragraph of 35 U.S.C. 112 states, "The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same...". The courts have interpreted this to mean that the specification must enable one skilled in the art to make and use the invention without undue experimentation.

The courts have further interpreted undue experimentation as requiring "ingenuity beyond that to be expected of one of ordinary skill in the art" (Fields v. Conover, 170 USPQ 276 (CCPA 1971)) or requiring an extended period of experimentation in the absence of sufficient direction or guidance (In re Colianni, 195 USPQ 150 (CCPA 1977)).

Additionally, the courts have determined that "... where a statement is, on its face, contrary to generally accepted scientific principles", a rejection for failure to teach how to make and/or use is proper (In re Marzocchi, 169 USPQ 367 (CCPA 1971)).

Factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. 112, first paragraph, have been described in In re Colianni, 195 USPQ

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150, 153 (CCPA 1977), have been clarified by the Board of Patent Appeals and Interferences in Ex parte Forman, 230 USPQ 546 (BPAI 1986), and are summarized in In re Wands (858 F2d 731, 737, 8 USPQ2d 1400, 1404 (Fed Cir. 1988)).

Among the factors are the nature of the invention, the state of the prior art, the predictability or lack thereof in the art, the amount of direction or guidance present, the presence or absence of working examples, the breadth of the claims, and the quantity of experimentation needed. The instant disclosure fails to meet the enablement requirement for the reasons cited above and for following reasons:

The nature of the invention:

Presently claimed invention is drawn to a composition for permanent deformation of hair comprising at least one reducing agent selected from N-substituted formamidinesulphinic acid of formula (1) in claim 11.

The state of the prior art and the predictability or lack thereof in the art:

There is a lack of predictability in the art. Claims are drawn to a broad range of compositions and there is support in the specification for such claims.

The amount of direction or guidance present and the presence or absence of working examples:

Enablement must be provided by the specification unless it is well known in the art. *In re Buchner* 18 USPQ 2d 1331 (Fed. Cir. 1991).

One skilled in the art would have no idea how to practice the invention.

The breadth of the claims and the quantity of experimentation needed:

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Since the compositions as claimed is broad and the use is unpredictable and there is lack of guidance present in the specification, one skilled in the art would have to go through undue experimentation to make and use the presently claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

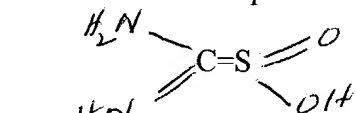
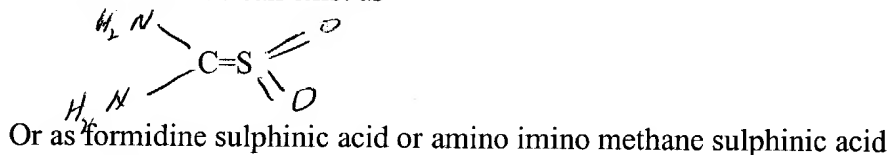
This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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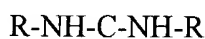
invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11-12, 14-42 rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1,201,601, GB1334636. See the entire documents, especially in GB '601 lines 1-26 on page 2; lines 39-91, claims and examples I, II and III in GB '601. The reference teaches a hair composition, which embraces Applicants's claimed invention. GB '601 teaches a reducing composition for hair waving or straightening containing aminoiminomethanesulfinic acid or a water-soluble salt thereof with other ingredients and pH ranging from 5-8. See also lines 5-45 on page 3.

Thiourea Dioxide can exist as



See the entire document of GB '636 especially lines 44-83 on page 1, examples and claims. The reference teaches a composition for dyeing human hair comprising thiocarboxamide derivative of formula



Where R represents H or alkyl radical having 1-4 carbon atom, a reducing agent and an organic chelating agent. The reference teaches the use of reducing agent.

Instant claims differ from the reference in different generic scope. Instant claims are broader than the prior art.

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It would have been obvious at the time of invention to prepare additional beneficial reducing compositions for any use such as the deformation of hair in waving or other operations comprising aminoiminosulphinic acid because composition as claimed are disclosed by the prior art. All the conventional ingredients are taught by the prior art including an active agent. The motivation to prepare reducing composition for deformation of hair was provided by the prior art.

Even if the references cited above does not teach use for permanent deformation of hair by at least one compound of formula (1) in claim 11, the two different intended uses are not distinguishable in terms of the composition, see *In re Thuau*, 57 USPQ 324; *Ex parte Douros*, 163 USPQ 667; and *In re Craige*, 89 USPQ 393.

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

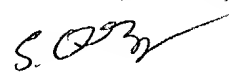
Telephonic Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha N. Qazi whose telephone number is (571) 272-0622. The examiner can normally be reached on any business day.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sabiha N. Qazi
Primary Examiner
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4/25/04